

CLAIMS

1. (Currently amended) A method comprising:

transmitting ~~information indicating~~ a respective telephone number from a network troubleshooting center (NTC) to a plurality of network analyzers (NAs) monitoring communication lines through which Voice-over-Internet Protocol (VoIP) data streams are transmitted; and

after receiving the ~~transmitted information~~ telephone number, collecting quality of service data by the NAs for data streams associated with a telephone call having the telephone number as a source or destination and transmitted through the communication lines, and providing quality of service information by the NAs to the NTC based on the collected quality of service data.

2. (Canceled)

3. (Currently amended) A method as in claim 1, further comprising, before the step of collecting quality of service data, the step of:

after receipt of the ~~transmitted information~~ telephone number, monitoring call control information by each NA on the corresponding communication line in accordance with the ~~received information~~ telephone number to try to identify a data stream associated with a telephone call having the telephone number as a source or destination;

transmitting, by a first NA of the NAs to identify the data stream, identifying information of the identified data stream to the NTC; and

after receipt of the transmitted identifying information, communicating between the

NTC and the NAs so that each NA has the identifying information, collects quality of service data for data streams associated with the telephone call and transmitted through the communication lines, and provides quality of service information to the NTC based on the collected quality of service data.

4. (Original) A method as in claim 1, wherein the telephone call is based on Session Initialization Protocol (SIP).

5. (Canceled)

6. (Original) A method as in claim 3, wherein the telephone call is based on Session Initialization Protocol (SIP).

7. (Currently amended) A method comprising:

transmitting ~~information indicating~~ a respective telephone number from a network troubleshooting center (NTC) to network analyzers (NAs) monitoring respectively corresponding communication lines through which Voice over Internet Protocol (VoIP) data streams are transmitted;

after receipt of the ~~transmitted information~~ telephone number, monitoring call control information by each NA on the corresponding communication line in accordance with the received information to try to identify a data stream associated with a telephone call having the telephone number as a source or destination;

transmitting, by a first NA of the NAs to identify the data stream, identifying information of the identified data stream to the NTC;

after receipt of the transmitted identifying information, transmitting a message from the NTC to the NAs to cause the NAs to stop trying to identify a data stream associated with the telephone call, and providing the identifying information to the NAs; and,

after receipt of the message from the NTC, and in accordance with the identifying information provided by the received message, collecting quality of service data by the NAs for data streams associated with the telephone call and transmitted through the communication lines, and providing quality of service information by the NAs to the NTC based on the collected quality of service data.

8. (Original) A method as in claim 7, wherein the telephone call is based on Session Initialization Protocol (SIP).

9. (Currently amended) An apparatus comprising:

a network troubleshooting center (NTC) for transmitting ~~information indicating a~~ telephone number; and

a plurality of network analyzers (NAs) for monitoring respectively corresponding communication lines through which Voice over Internet Protocol (VoIP) data streams are transmitted, wherein, after receiving the ~~transmitted information indicating a~~ telephone number, the NAs collect quality of service data for data streams associated with a telephone call having the telephone number as a source or destination and transmitted through the communication lines, and provide quality of service information to the NTC based on the collected quality of service data.

10. (Canceled)

11. (Currently amended) An apparatus as in claim 9, wherein:

the NTC transmits ~~information indicating~~ a respective telephone number to the NAs;
after receipt of the transmitted information, each NA monitors call control information on the
corresponding communication line in accordance with the received information to try to
identify a data stream associated with a telephone call having the telephone number as a
source or destination;

a first NA of the NAs to identify the data stream transmits identifying information of
the identified data stream to the NTC; and

after receipt of the transmitted identifying information, the NTC communicates with
the NAs so that each NA has the identifying information, collects quality of service data for
data streams associated with the telephone call and transmitted through the communication
lines, and provides quality of service information to the NTC based on the collected quality
of service data.

12. (Original) A method as in claim 9, wherein the telephone call is based on Session
Initialization Protocol (SIP).

13. (Canceled)

14. (Original) A method as in claim 11, wherein the telephone call is based on Session
Initialization Protocol (SIP).

15. (Canceled)

16. (Canceled)

17. (Currently amended) An apparatus comprising:

means for transmitting ~~information indicating~~ a respective telephone number from a network troubleshooting center (NTC) to network analyzers (NAs) monitoring respectively corresponding communication lines through which Voice over Internet Protocol (VoIP) data streams are transmitted;

means for, after receipt of the ~~transmitted information~~ telephone number, monitoring call control information by each NA on the corresponding communication line in accordance with the received information to try to identify a data stream associated with a telephone call having the telephone number as a source or destination;

means for transmitting, by a first NA of the NAs to identify the data stream, identifying information of the identified data stream to the NTC;

means for, after receipt of the transmitted identifying information, transmitting a message from the NTC to the NAs to cause the NAs to stop trying to identify a data stream associated with the telephone call, and providing the identifying information to the NAs; and

means for, after receipt of the message from the NTC, and in accordance with the identifying information provided by the received message, collecting quality of service data by the NAs for data streams associated with the telephone call and transmitted through the communication lines, and providing quality of service information by the NAs to the NTC based on the collected quality of service data.

18. (Original) An apparatus as in claim 17, wherein the telephone call is based on Session

Initialization Protocol (SIP).